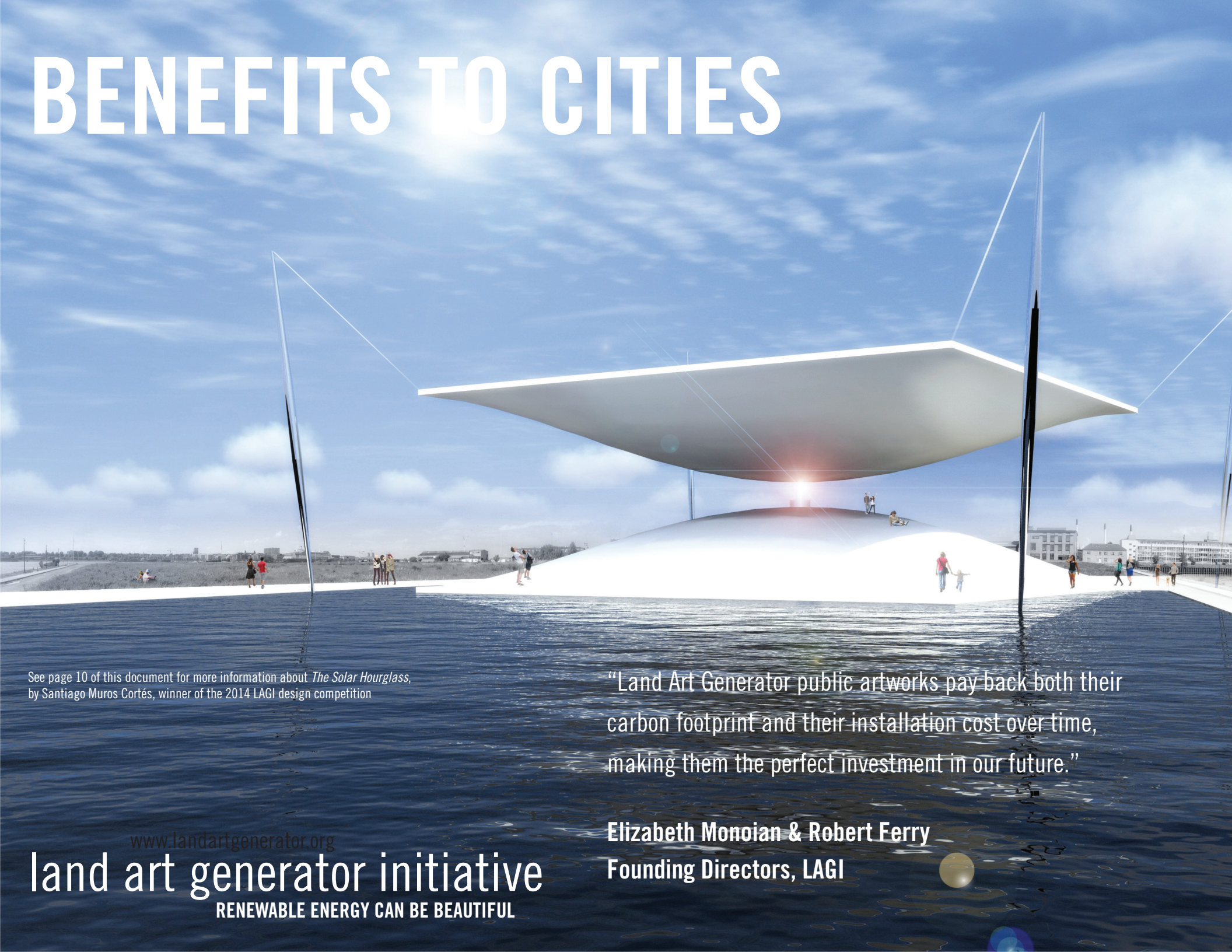


BENEFITS TO CITIES

An architectural rendering of a large, modern public artwork titled 'The Solar Hourglass'. The structure consists of a large, white, hourglass-shaped canopy supported by several tall, thin, black poles. The canopy is suspended over a body of water, and its reflection is visible on the surface. The sun is positioned directly behind the center of the canopy, creating a bright, glowing effect. In the background, a city skyline is visible under a blue sky with scattered clouds. Several small figures of people are scattered around the base of the structure, providing a sense of scale.

See page 10 of this document for more information about *The Solar Hourglass*, by Santiago Muros Cortés, winner of the 2014 LAGI design competition

“Land Art Generator public artworks pay back both their carbon footprint and their installation cost over time, making them the perfect investment in our future.”

www.landartgenerator.org

land art generator initiative
RENEWABLE ENERGY CAN BE BEAUTIFUL

Elizabeth Monoian & Robert Ferry
Founding Directors, LAGI

Connie Hedegaard

European Commissioner for Climate Action

“When it comes to renewables it’s not a question of nice to have. The world of the 21st century needs to have more renewables. We have seen here in Denmark that it is doable. We see it in Europe. But I think in order to scale things up, it would be so good to have some more input from artists, from creative thinking people, who know how to landscape things in a better manner. Who can show attractive visions. Who can show that to take climate change seriously it not about gloom and doom—it can be a positive vision. It can create beauty. It can create something that all of us would like to be a part of.”

Martin Lidegaard

Former Danish Minister of Climate, Energy, and Building

“Land Art Generator Initiative provides new and exciting proposals for approaching the green transition. We saw in the previous exhibitions in Dubai in 2010 and New York City in 2012, where creative forces of art, architecture, and engineering together brought forth innovative ideas, concepts, and solutions that can produce green energy while being integrated to beautify the local environment.”

www.landartgenerator.org

land art generator initiative

RENEWABLE ENERGY CAN BE BEAUTIFUL

The Land Art Generator Initiative (LAGI) has brought together a network of artists, architects, scientists, landscape architects, and engineers in a first of its kind collaboration.

The goal of the Land Art Generator Initiative is to design and construct public art installations that uniquely combine aesthetics with utility scale clean energy generation. The works will serve to inspire and educate while they provide renewable power to thousands of homes around the world.

Presenting the power plant as public artwork—simultaneously enhancing the environment, increasing livability, providing a venue for learning, and stimulating local economic development—is a way to address a variety of issues. By nature of its functional utility, the work also sets itself into many other overlapping disciplines from architecture and urban design to mechanical engineering and environmental science. This interdisciplinary result has the effect of both enhancing the level of innovation and broadening the audience for the work.

LIGHT SANCTUARY

ARTWORK DESIGNED BY

Martina Decker & Peter Yeadon

A submission to the 2010 United Arab Emirates Land Art Generator Initiative competition



LEVERAGING THE POWER OF PUBLIC ART

The incorporation of renewable energy systems into the public art component of any project brings a dual benefit that is greater than the sum of its parts.

1% for the arts works hand-in-hand with on-site renewable energy generation credits for LEED and other green building standards.

The art budget supports the on-site renewable budget, and conversely the on-site power generation budget supports the art budget, allowing both to extend further than either could do on its own. The project can afford more art and more energy generation without changing the bottom line capital expense.

THE VALUE OF PUBLIC ART

Beginning in the 20th century—supported by important programs such as the WPA Public Works of Art Project in the 30s, the National Endowment for the Arts, and “Percent for Art” initiatives through the present day—art outside of the gallery has become a critical aspect of urban planning and economic development programs in cities around the world.

The importance of public art to the health of public space and the vibrancy of city streets is widely appreciated. Public art serves many purposes. It teaches, inspires, and adds pleasure and interest to our days. It generates tourism and increased economic development. Public art can be participatory, objective, decorative, conceptual, interactive, functional, celebratory, critical, and reflective. It can be figural or abstract, static or kinetic, simple or complex. It can be bio-remediative, statistical, didactic, and profound. It can even be energy-generating.

The idea of creating public art that also fulfills a secondary role as object of utility has a long history—from Joseph Beuys’s *7,000 Oaks* and his idea of “social sculpture” to the many contemporary new media artists and ecological artists, whose public works often double as restored habitats, community projects, climate data displays, and educational venues.

Ever since there have been artworks in public spaces, there has been a rich conversation about the complex role that these interventions can play in the healthy operation of our cities.

There are many criticisms that have been levied (fairly and unfairly) against public art projects in the past. Some have been seen as unwise civic investment, some as disruptive to public spaces. Often, the projects which open themselves up to the most criticism are those that neglect some aspect of the public good in their implementation. One way of ensuring that new public art projects do not come to be criticized in these ways is to bring them together with capital projects that have inherent beneficial utility.

The Land Art Generator Initiative is working towards the construction of a new type of public art. At any scale and site-specific, these public artworks will be grid connected, renewable energy power plants.

Land art generators have the power to provide new tools for cities and developers with which to integrate renewable energy systems into the built environment while addressing public concerns about the usefulness of public art.

The Land Art Generator Initiative (LAGI) addresses public art within the urban fabric of the sustainable city. The objective is to advance the successful implementation of sustainable urban design solutions by integrating art and interdisciplinary creative processes into the conception of renewable energy infrastructure. The project can be subdivided into four main areas of focus:

LAGI design competition and associated events

Educational materials

Community outreach

Construction of aesthetic renewable energy infrastructure for cities and institutions

A primary goal of LAGI is to design and construct a series of large-scale site-specific installations that combine art with utility-scale clean energy generation. The artworks utilize the latest in renewable energy science and innovate the application of new technologies.

Cities and institutions can benefit from the economic efficiencies of combining public art and renewable energy infrastructure. When considering the capital costs of implementing utility-scale renewable energy artwork, the full spectrum of return on the investment should be considered.

THIS INCLUDES

City Beautification: all of the traditional benefits of public art

Education: artworks provide places for citizens to learn about sustainable systems and to see renewable energy in action. The Land Art Generator Initiative and Society for Cultural Exchange are available to provide workshops and educational programs in your city.

Healthy Environment: CO₂ emissions reduction results from the artwork construction.

Healthy Communities: people coming together to support sustainable development.

Economic Development: land art generators bring positive attention to the city.

Innovation: interdisciplinary collaboration drives technological creativity.

Electrical Generation: land art generators have the potential to power thousands of homes with clean and renewable energy.

LAGI has held three international design competitions in partnership with private & public entities.

In January of 2010 LAGI put out our first international call to artists, architects, scientists, landscape architects, and engineers to come up with both aesthetic and pragmatic solutions for 21st century energy challenges.

2010 — DUBAI & ABU DHABI



The design brief for the LAGI design competition contains the following baseline requirements—the artwork is to capture energy from nature, cleanly convert it into electricity, and transform and transmit the electrical power to a grid connection point to be supplied by the city. Consideration should be made for the safety of the viewing public and for the educational activities that may occur on site. The design should be constructible (rather than theoretical), and it must respect the natural ecosystem of the design sites.

2012 — NEW YORK CITY, FRESHKILLS PARK



The 2010 LAGI design competition was held for three sites in the UAE and we received hundreds of submissions from over 40 countries.

In partnership with New York City's Department of Parks & Recreation we held the 2012 LAGI design competition for a site within Freshkills Park (the former Fresh Kills Landfill). We received 250 submissions from around the world.

2014 — COPENHAGEN



LAGI 2014 came to Copenhagen at an opportune moment. As the city (the European Green Capital of 2014) moves towards carbon neutral status by 2025 the debate over the aesthetic manifestation and human interaction component of our new energy infrastructure is becoming increasingly important to the planning strategies required to attain zero-carbon sustainability goals. LAGI has been delighted to be an event partner of Sharing Copenhagen, the official celebration of Copenhagen's status of 2014 European Green Capital.

WHAT ISSUES DOES LAGI ADDRESS?

Community Reluctance to Renewable Energy Infrastructure

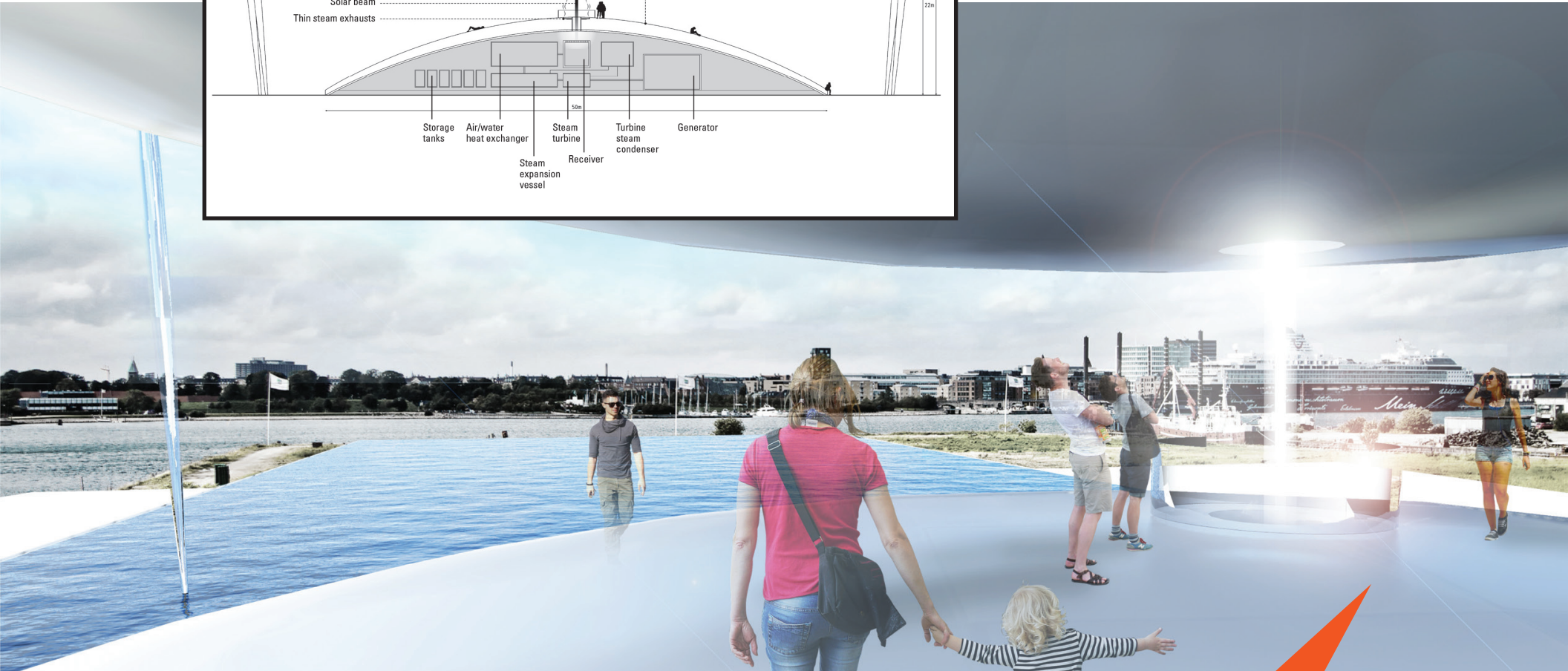
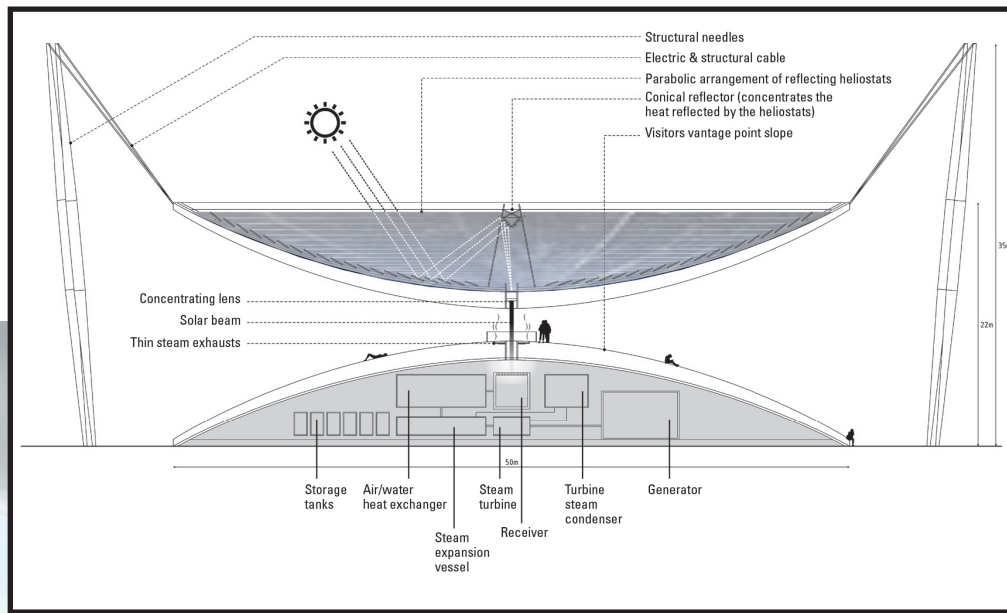
Every day it seems there is a new story about people disapproving of solar or wind installations in their communities. To some people, the addition of turbines to the skyline that they can see from their porch or long stretches of dark blue panels in a field where there used to be grass are forms of visual pollution.

Innovation

LAGI installations will have value beyond the energy that it produces and will have the potential to both establish new revenue streams from site activities or payback the city in economic stimulus from increased tourism to the site.

Sustainable City Planning

LAGI installations provide energy to the grid can give urban planners a new and versatile tool for bringing renewable energy generation into cities both small and large.



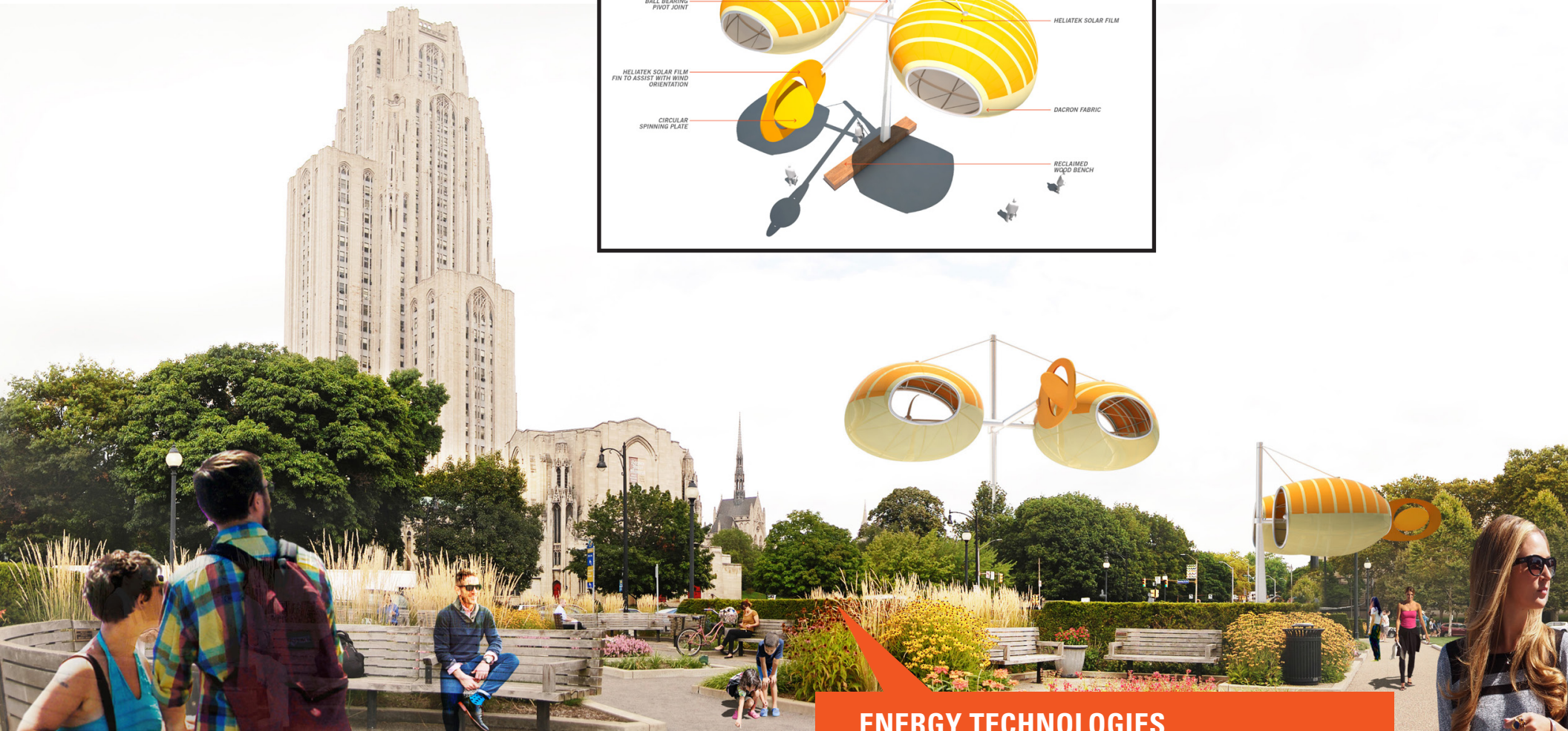
THE SOLAR HOURGLASS

ARTWORK DESIGNED BY
Santiago Muros Cortés

A submission to the 2014 Copenhagen Land Art Generator Initiative competition

ENERGY TECHNOLOGIES
concentrated solar power
(heliostats with beam-down tower)

www.landartgenerator.org
land art generator initiative
RENEWABLE ENERGY CAN BE BEAUTIFUL



WINDNEST

ARTWORK DESIGNED BY
Clare Olsen & Trevor Lee

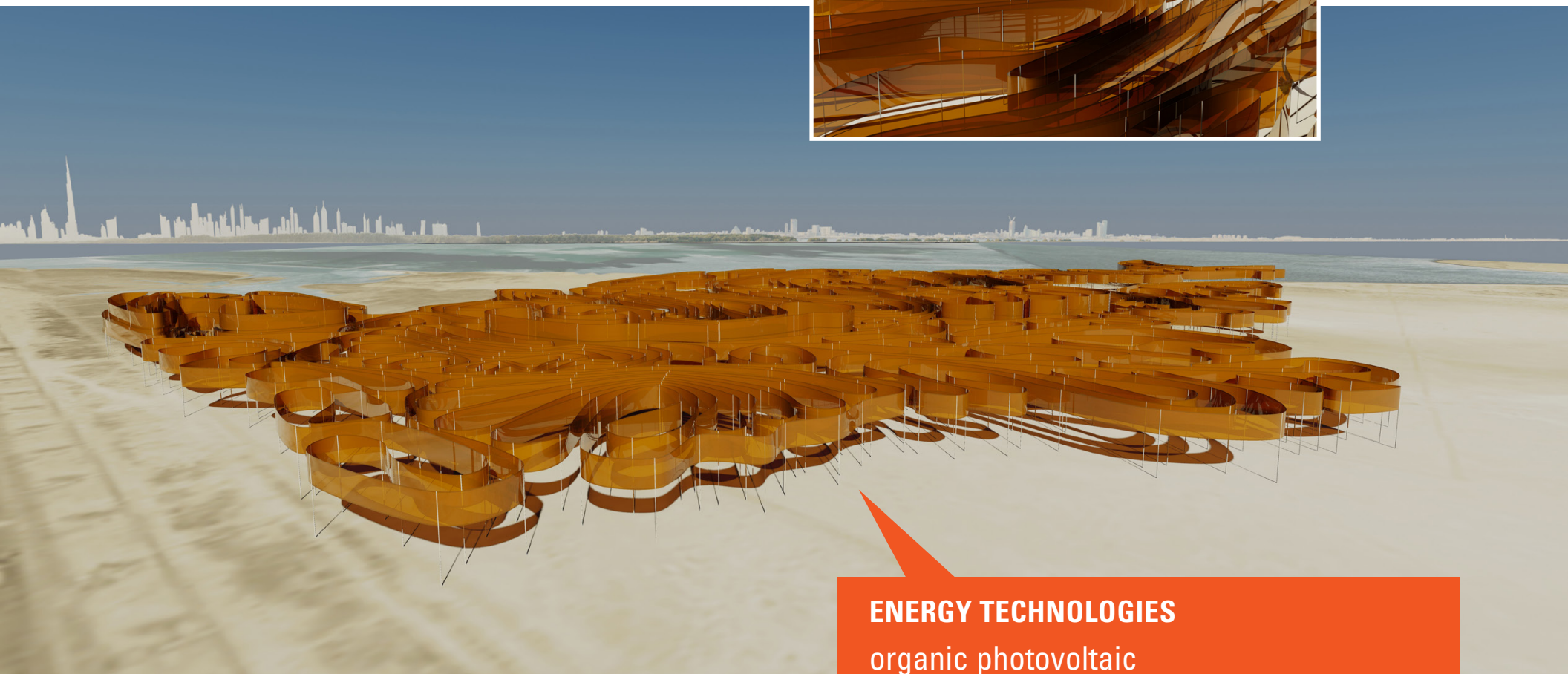
A submission to the 2010 United Arab Emirates Land Art Generator Initiative competition

Currently being built in Pittsburgh, PA.

ENERGY TECHNOLOGIES

compact wind acceleration turbines,
flexible thin film solar

www.landartgenerator.org
land art generator initiative
RENEWABLE ENERGY CAN BE BEAUTIFUL



ENERGY TECHNOLOGIES

organic photovoltaic
(similar to Heliatek™, or Solarmer™)

LIGHT SANCTUARY

ARTWORK DESIGNED BY
Martina Decker & Peter Yeadon

A submission to the 2010 United Arab Emirates Land Art Generator Initiative competition

www.landartgenerator.org
land art generator initiative
RENEWABLE ENERGY CAN BE BEAUTIFUL



ENERGY TECHNOLOGIES
Sphelar® omnidirectional
photovoltaics

PV DUST

ARTWORK DESIGNED BY

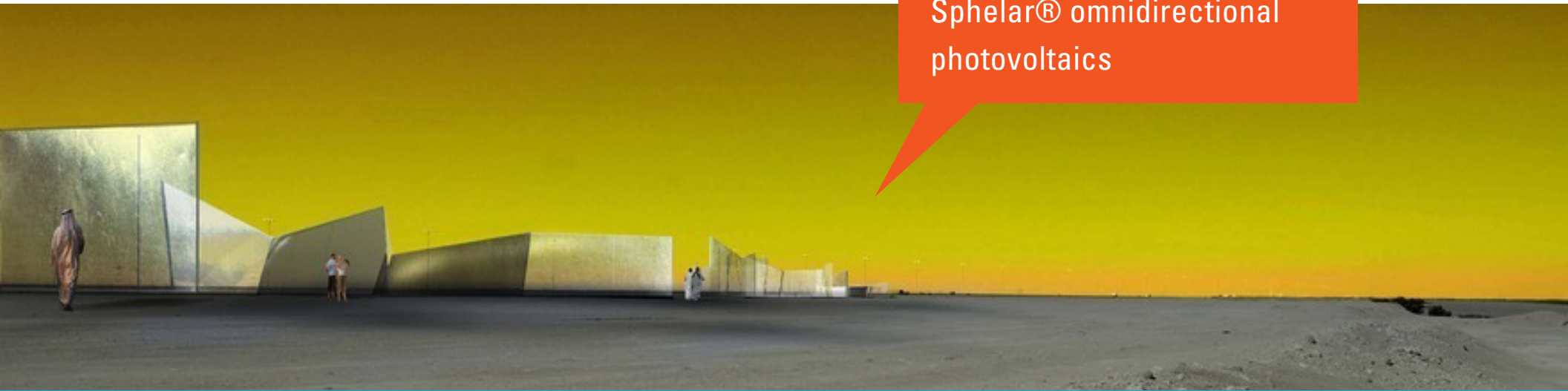
George Legendre, Emanuele Mattutini, Jean-Aime Shu, Alfonso Senatore

A submission to the 2010 United Arab Emirates Land Art Generator Initiative competition

www.landartgenerator.org
land art generator initiative
RENEWABLE ENERGY CAN BE BEAUTIFUL

ENERGY TECHNOLOGIES

Sphelar® omnidirectional
photovoltaics



S FLOW

ARTWORK DESIGNED BY

Joanna Wlaszyn

A submission to the 2010 United Arab Emirates Land Art Generator Initiative competition

www.landartgenerator.org
land art generator initiative
RENEWABLE ENERGY CAN BE BEAUTIFUL



SOLAR LOOP

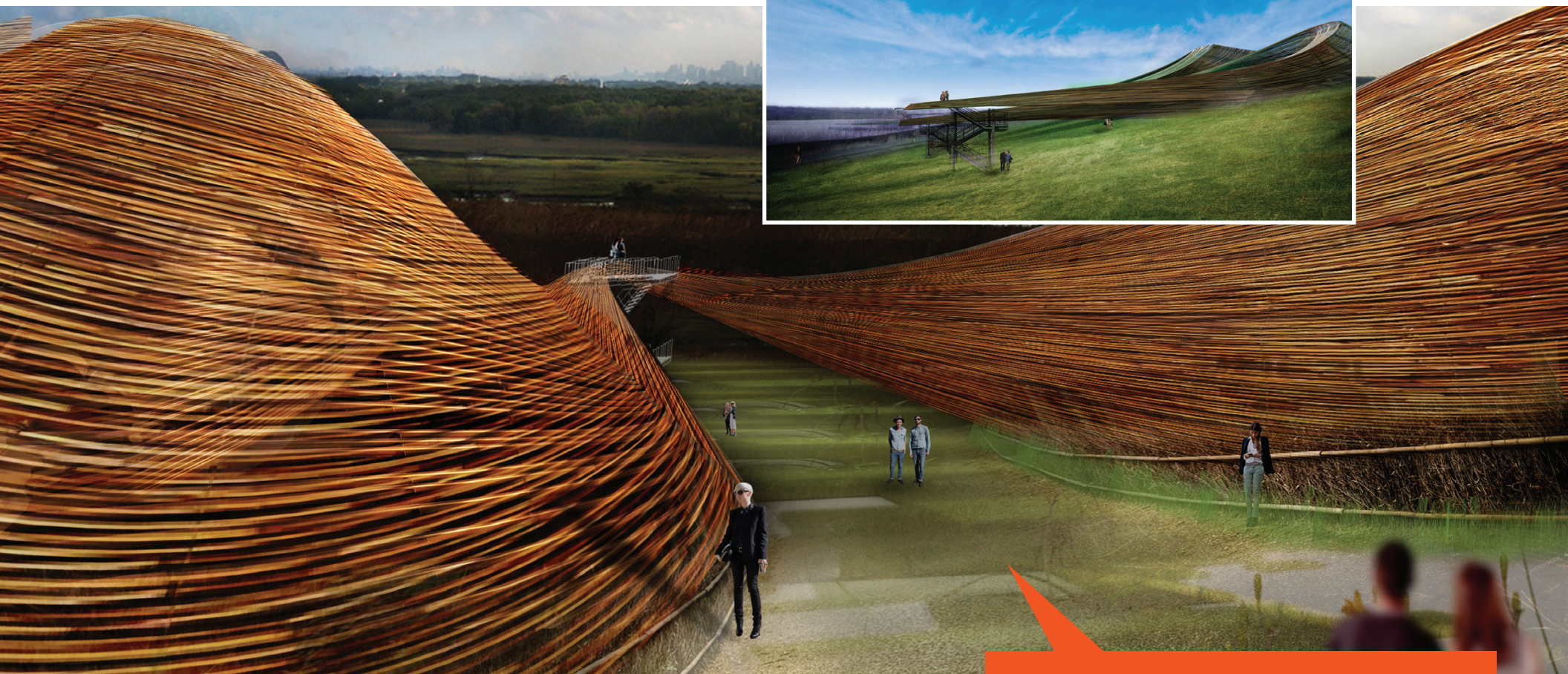
ARTWORK DESIGNED BY

Paolo Venturella, Alessandro Balducci, Gilberto Bonelli, Rocco Valantines,
Mario Emanuele Salini, Pietro Bodri

A submission to the 2012 NYC Land Art Generator Initiative competition

ENERGY TECHNOLOGIES
Silicon PV Panels

www.landartgenerator.org
land art generator initiative
RENEWABLE ENERGY CAN BE BEAUTIFUL



FRESH HILLS

ARTWORK DESIGNED BY

Mathew Rosenberg, Matt Melnyk, Emmy Maruta, Robbie Eleazer

A submission to the 2012 NYC Land Art Generator Initiative competition

ENERGY TECHNOLOGIES

WindTamer™ wind lens turbine
(or similar)

www.landartgenerator.org
land art generator initiative
RENEWABLE ENERGY CAN BE BEAUTIFUL



BEYOND THE WAVE

ARTWORK DESIGNED BY

Jaesik Lim, Ahyoung Lee, Sunpil Choi, Dohyoung Kim, Hoeyoung Jung,
Jaeyeol Kim, Hansaem Kim

A submission to the 2014 Copenhagen Land Art Generator Initiative competition

ENERGY TECHNOLOGIES
organic thin film (OPV)

www.landartgenerator.org
land art generator initiative
RENEWABLE ENERGY CAN BE BEAUTIFUL



TRANSPIRE

ARTWORK DESIGNED BY

Christopher Choa, Rachael Pengilley, Shaffee Jones-Wilson, Maged Hanna, Daniel Elsea, Hardik Pandit, Margot Orr, Michael Bonnington, Jules Cocke, Nick Taylor, Amelia Roberts

A submission to the 2010 United Arab Emirates Land Art Generator Initiative competition

ENERGY TECHNOLOGIES
concentrated solar power
(parabolic trough)



TREE

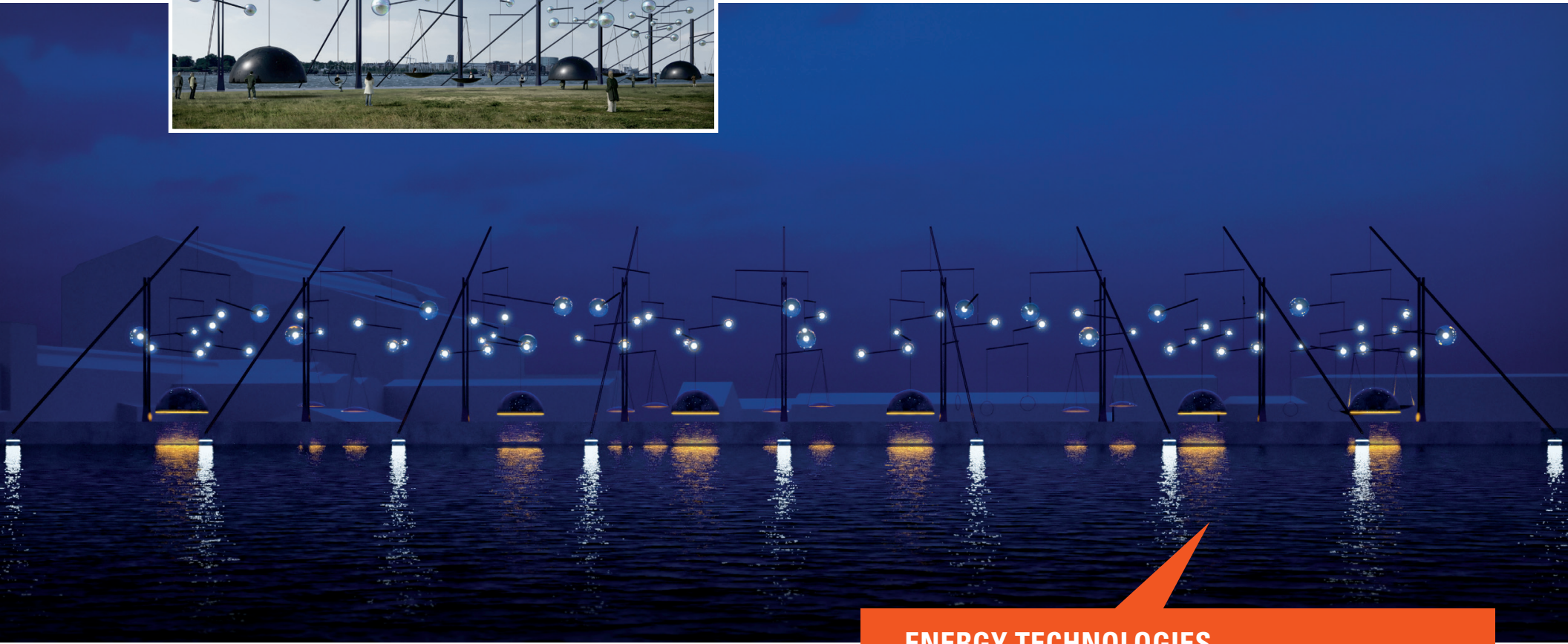
ARTWORK DESIGNED BY

Yijie Dang, Tom Tang

A submission to the 2012 NYC Land Art Generator Initiative competition

ENERGY TECHNOLOGIES

kinetic generators such as the M2E Power Kinetic Battery, piezoelectric generators



BALANCE / IMBALANCE

ARTWORK DESIGNED BY
Hideaki Nishimura

A submission to the 2014 Copenhagen Land Art Generator Initiative competition

ENERGY TECHNOLOGIES

Sphelar® photovoltaic, piezoelectric film

www.landartgenerator.org
land art generator initiative
RENEWABLE ENERGY CAN BE BEAUTIFUL

ENERGY TECHNOLOGIES

photovoltaic, wind torque generator



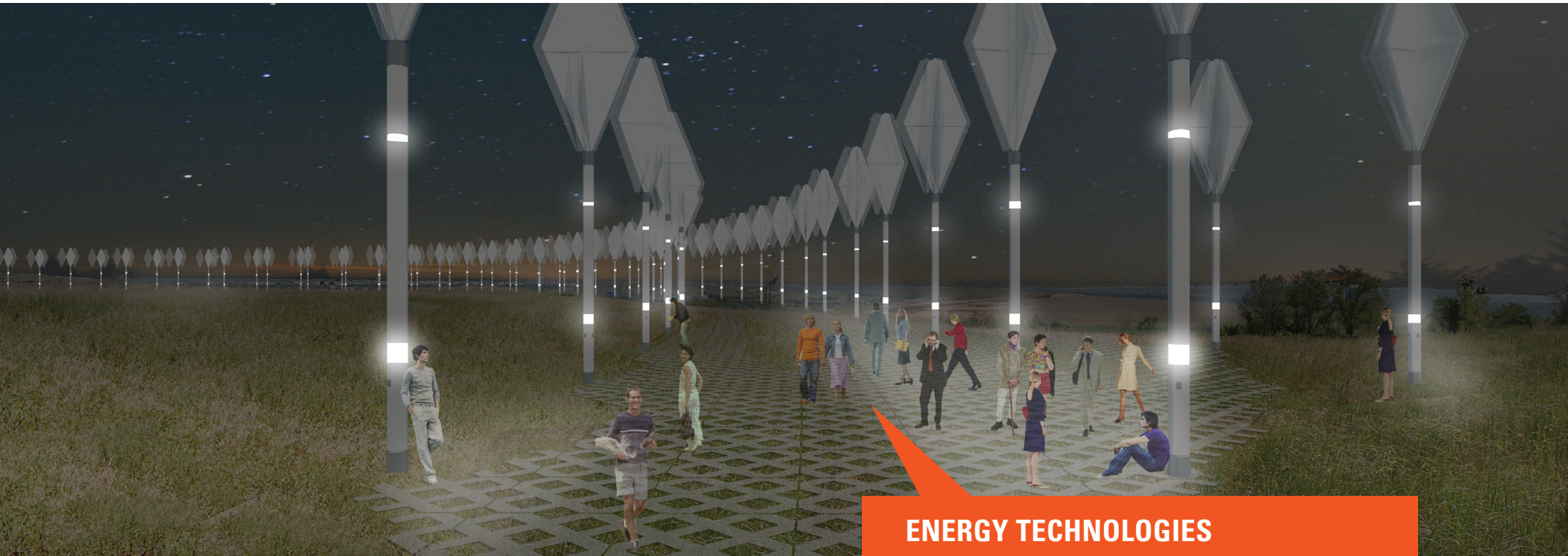
SWAYING FOR THE NEXT GENERATION

ARTWORK DESIGNED BY

Andrew Weston, Chris Williamson, Daniele Sini, Travis Walsh, Lucy Weston
(StudioAR: Architects)

A submission to the 2012 NYC Land Art Generator Initiative competition

www.landartgenerator.org
land art generator initiative
RENEWABLE ENERGY CAN BE BEAUTIFUL



ENERGY TECHNOLOGIES
photovoltaic panel
and vertical axis wind turbine

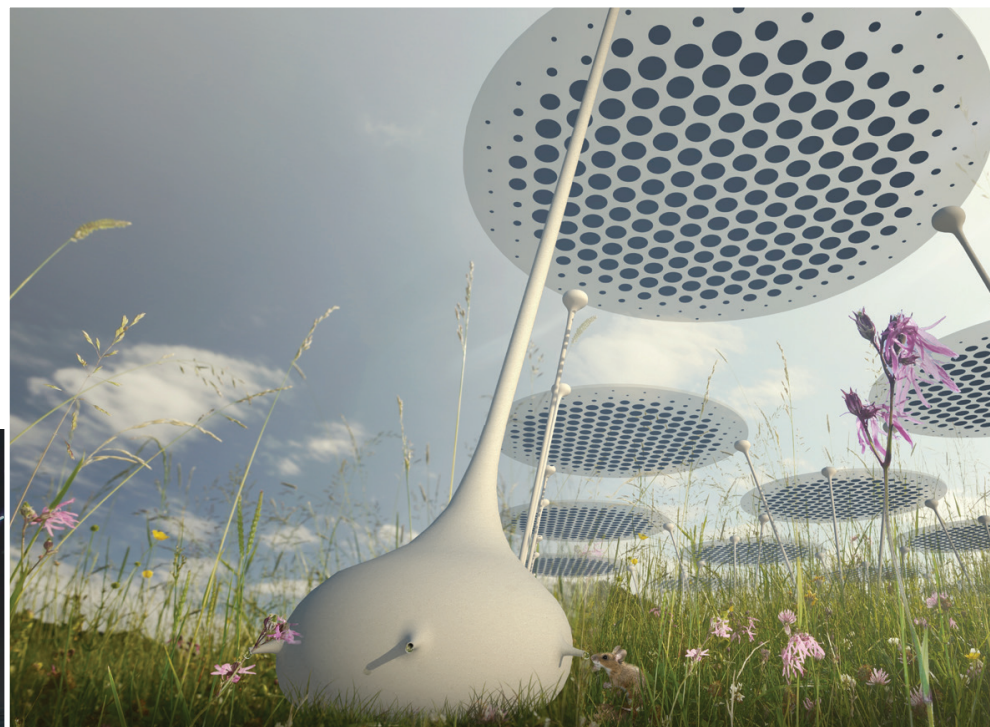
BLOSSOMINGS

ARTWORK DESIGNED BY

Inki Hong, Solim Choi, Walter Sueldo (Architecture i.S)

A submission to the 2012 NYC Land Art Generator Initiative competition

www.landartgenerator.org
land art generator initiative
RENEWABLE ENERGY CAN BE BEAUTIFUL



HELIOFIELD

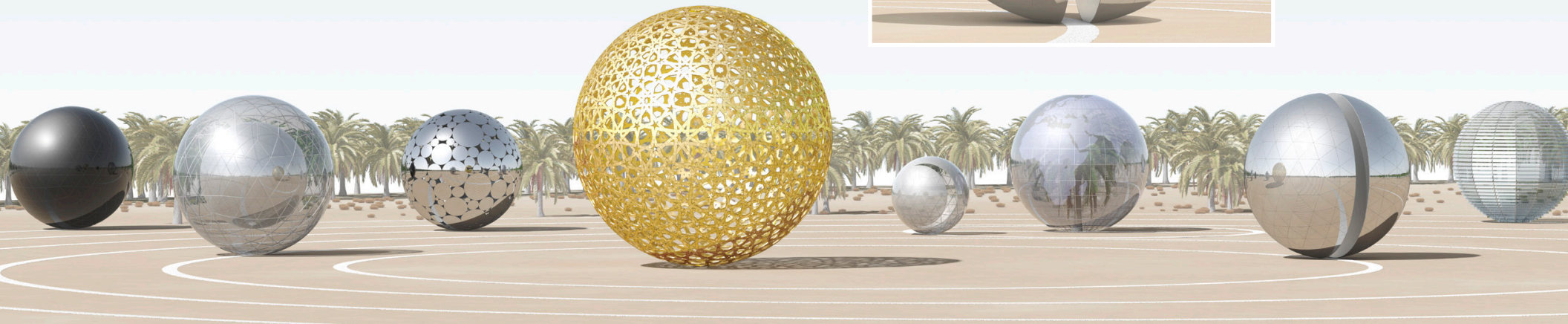
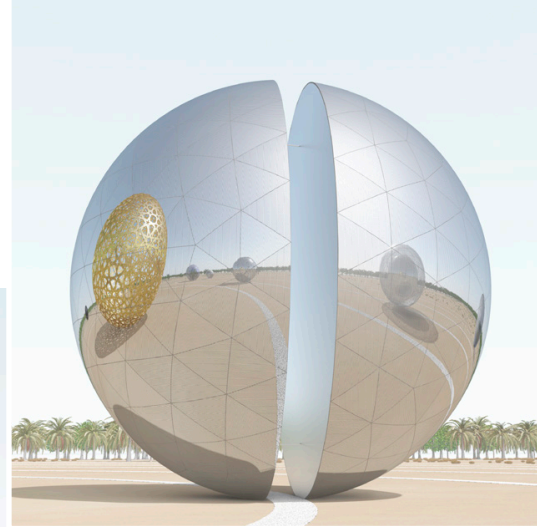
ARTWORK DESIGNED BY

Michael Chaveriat, Yikyu Choe, Myung Kweon Park

A submission to the 2012 NYC Land Art Generator Initiative competition

ENERGY TECHNOLOGIES
photovoltaic thin film

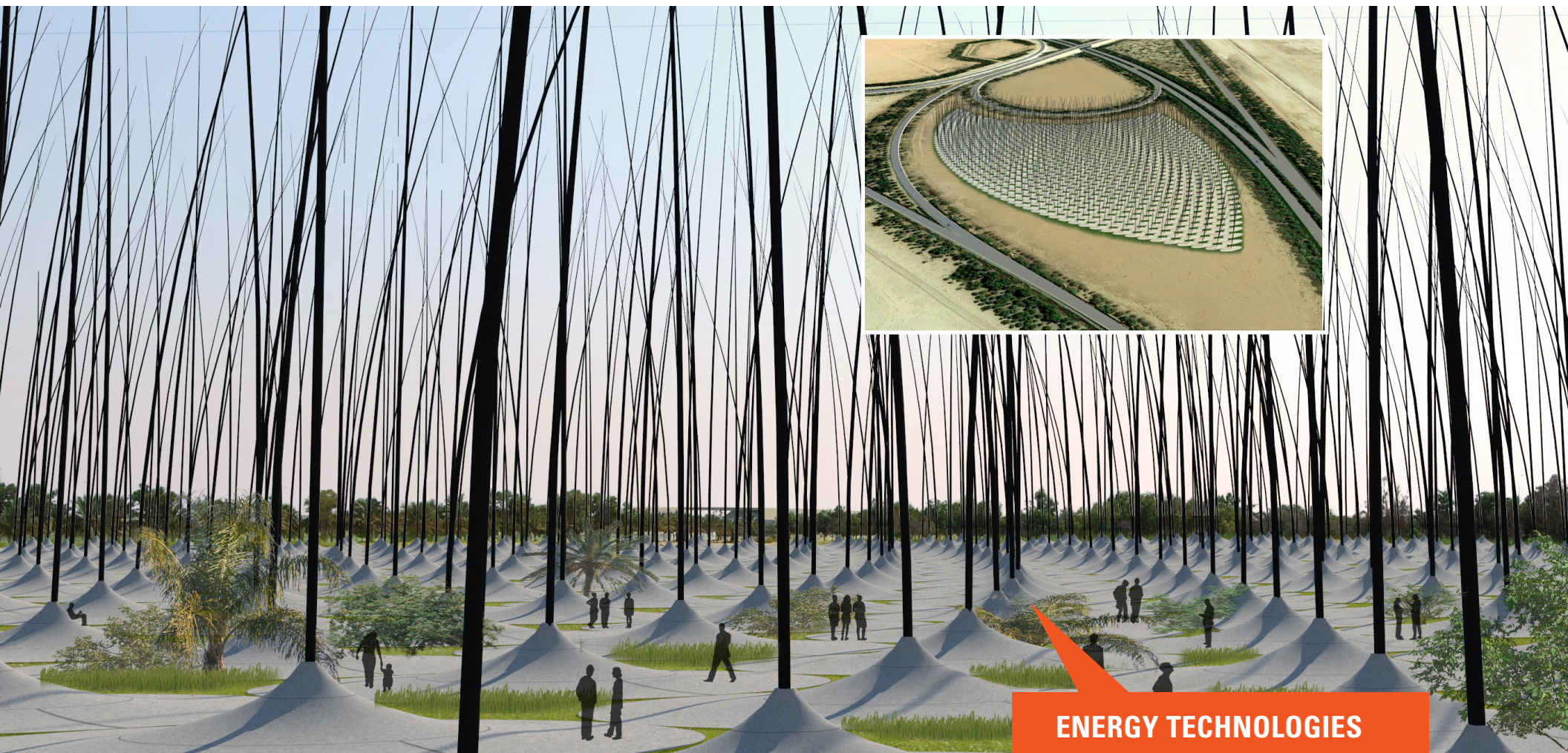
ENERGY TECHNOLOGIES
photovoltaic panels



SOLAR ECO SYSTEM

ARTWORK DESIGNED BY
Antonio Maccà, Flavio Masi

A submission to the 2010 United Arab Emirates Land Art Generator Initiative competition



WINDSTALK

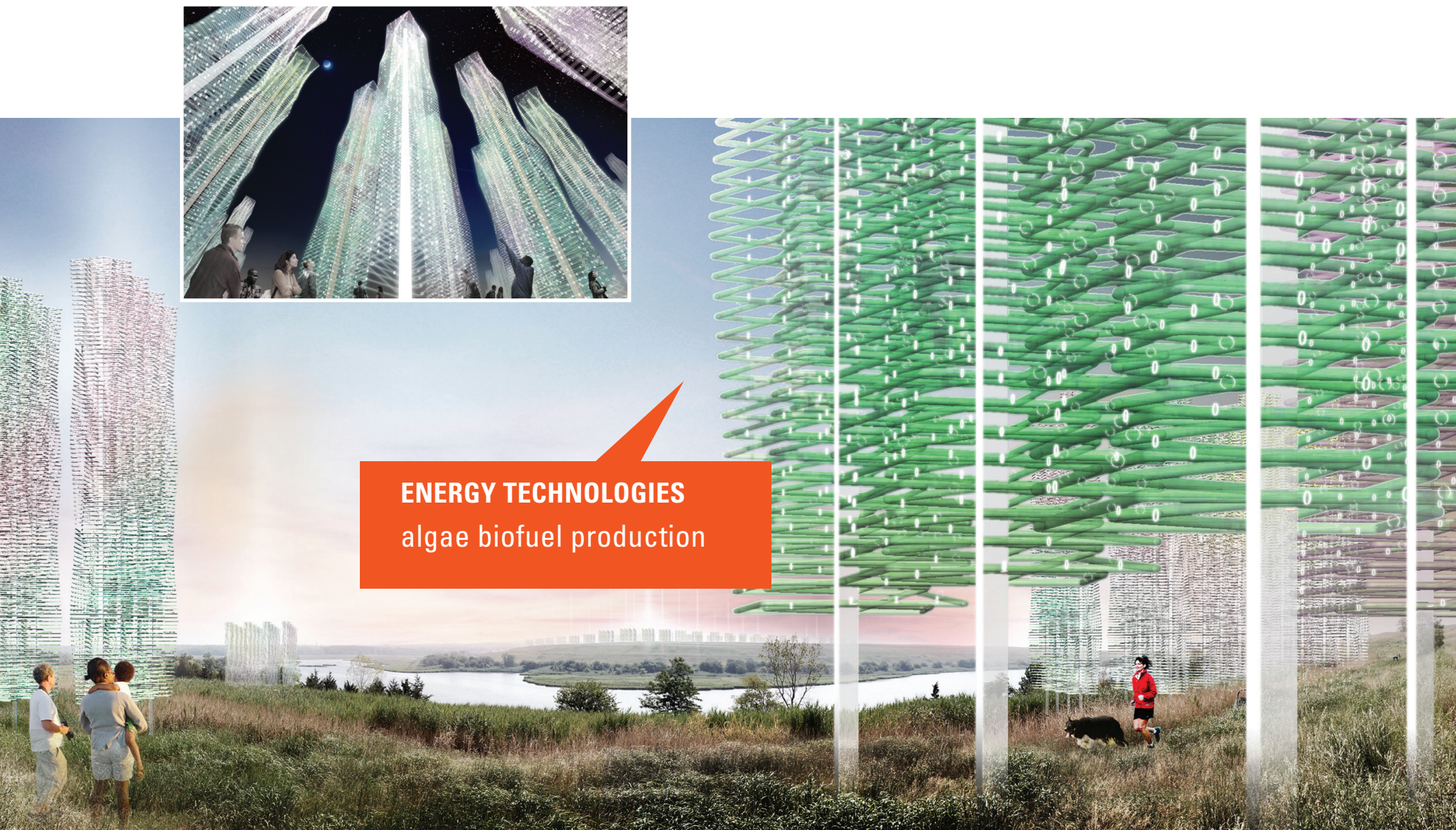
ARTWORK DESIGNED BY

Darío Núñez-Ameni & Thomas Siegl, with Atelier dna

A submission to the 2010 United Arab Emirates Land Art Generator Initiative competition

ENERGY TECHNOLOGIES
piezoelectric generator,
torque generator

www.landartgenerator.org
land art generator initiative
RENEWABLE ENERGY CAN BE BEAUTIFUL



ENERGY TECHNOLOGIES
algae biofuel production

SHIFTING ALGAE FOREST

ARTWORK DESIGNED BY

Jessica Wolff, Abhishek Sharma, Pamela Richot, Ekachai Pattamasattayasonthi

A submission to the 2012 NYC Land Art Generator Initiative competition

www.landartgenerator.org
land art generator initiative
RENEWABLE ENERGY CAN BE BEAUTIFUL



ODE TO THE SUN

ARTWORK DESIGNED BY
Boulos Douaihy

A submission to the 2010 United Arab Emirates Land Art Generator Initiative competition

ENERGY TECHNOLOGIES
sun-tracking photovoltaic

www.landartgenerator.org
land art generator initiative
RENEWABLE ENERGY CAN BE BEAUTIFUL

EDUCATION & COMMUNITY OUTREACH

Since its conception in 2009, the Land Art Generator Initiative has reached millions of people around the world through community outreach and online presence (where visitors can browse through blog entries about renewable energy and ecological art).

Throughout the process of working with cities and institutions towards the implementation of renewable energy artworks, LAGI stays engaged with the community, providing educational workshops, lectures, and other events related to art, technology, and ecology.

LAGI has presented the project and its theoretical background at numerous panels and lectures internationally in the context of conferences on sculpture, urbanism, renewable energy, art history, the constructed environment, architecture, and electronic arts.

LAGI has several publications along with educational materials that can be downloaded for free from www.landartgenerator.org.

Visitors will also find many information graphics at the LAGI website. These graphics serve to make clear what may otherwise be complex issues related to the transition to renewable forms of energy.



A Field Guide to Renewable Energy Technologies (2012)
<http://landartgenerator.org/LAGI-FieldGuideRenewableEnergy-ed1.pdf>



Art+Energy Flash Cards (2014)
<http://landartgenerator.org/Art+EnergyFlashCards-Download.pdf>



The Times is Now: Public Art of the Sustainable City
Page One Publishing, ISBN 978-981-428-675-6 (2012)



Regenerative Infrastructures: Freshkills Park NYC,
Land Art Generator Initiative, Prestel Publishing,
ISBN: 978-3-7913-5286-2 (2013)



New Energies: Land Art Generator Initiative,
Prestel Publishing, ISBN: 978-3-7913-5369-2 (2014)

**The capacity of public artwork
(especially large-scale and high profile
works) to increase economic activity
is well documented.**

According to the NYC Economic Development Corporation, NYC Waterfalls by Olafur Eliasson, cost \$15.5 million to install (privately funded) and brought an estimated \$53 million in incremental spending from visitors who came to see the installation over the nearly four months that it was in operation. That's an extra \$483,000 per day to Manhattan businesses as a direct result of a public art installation.

Imagine a permanent work of art, of a similar scale, and with similar economic stimulus benefit.

And now imagine that this work of art educates hundreds of visitors every day about the technology that it employs, while contributing clean energy to the electrical grid equivalent to the energy consumed by hundreds or even thousands of homes. It may be that sustainable cities of the future will seize on the opportunity and efficiency that may come from the fusion of renewable energy infrastructure and public art amenity.

Dr. Sultan Al Jaber, (former) CEO of Masdar

“The final beauty of this initiative is that we now can explore the feasibility of implementing all of the leading submissions—creating a link between a future vision and today’s reality.”

For more information contact:

LAGI Founding Directors

Elizabeth Monoian & Robert Ferry

lagi@landartgenerator.org

+1 509 961 6237

www.landartgenerator.org